

**Methodology** In this retrospective cohort study, we identified patients aged  $\geq 18$  years with OC ( $\geq 2$  OC diagnoses within 90 days) in Optum's de-identified electronic health record (EHR) database (1/1/2017 – 6/30/2020; N=16.6M total female lives). Index date was the first diagnosis of OC. Patients were stratified by BRCA/ATM status and followed for up to 24 months to assess overall survival (OS). Death was captured from the EHR and linked social security and obituary data. Two-year OS rates were evaluated using the Cox Proportional-Hazards model, adjusting for baseline demographics, comorbidities, clinical and prognostic factors.

**Result(s)\*** Among 11,206 patients with OC, 1,901 (17.0%) had evidence of being tested for BRCA/ATM: 616 (32.4%) had BRCA/ATM mutation, 682 (35.9%) did not BRCA/ATM mutation, and 603 (31.7%) had unknown status. Patients with BRCA/ATM mutation had a mean age (SD) 59.5 (10.9) and 62.2 (12.1) years, respectively; 35.9% of patients with BRCA/ATM mutation had visceral metastasis at diagnosis compared with 31.8% with no mutation. Of patients with known stage at diagnosis and with BRCA/ATM mutation (N=416), 77.2% presented at stage 3/4 compared with 70.6% of patients without BRCA/ATM mutation (N=503). Patients with BRCA/ATM mutation and no BRCA/ATM mutation were observed for a median of 705 days and 697 days, respectively. Two-year OS rates were not significantly different by BRCA/ATM mutation status (yes: 79.2% vs no: 75.4%,  $p=0.13$ ); unadjusted hazard ratio (HR) 1.22 (95% CI =0.94–1.58); adjusted HR 1.12 (95% CI 0.85–1.47).

**Conclusion\*** In this observational study of US patients with ovarian cancer, there was no statistically significant difference in two-year OS rates between patients with or without BRCA/ATM mutation. Additional research is needed to evaluate the association between BRCA/ATM status and overall survival in different patient populations.

480

#### COMPARISON OF PRIMARY VS. INTERVAL DEBUNKING SURGERY IN PATIENTS WITH OVARIAN CANCER MANAGED WITH ERAS PROTOCOL

D Zouzoulas\*, D Tsolakidis, C Zymperdikas, K Chatzistamatiou, C Anthoulakis, E Markopoulou, P Ioannidou, V Korvesi, T Mikos, T Theodoridis, E Mpili, G Pados, G Grimbizis. Aristotle University of Thessaloniki, 1st Department of Obstetrics and Gynecology, Thessaloniki, Greece

10.1136/ijgc-2021-ESGO.411

**Introduction/Background\*** Complete cytoreduction is the cornerstone of the treatment for ovarian cancer (OC). Patients are triaged either for primary debulking surgery (PDS) or neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS), based on the preoperative assessment. The aim of this study is to evaluate the impact of the enhanced recovery after surgery (ERAS) protocol in postoperative morbidity for both groups (PDS vs. IDS).

**Methodology** Retrospective analysis of women with OC from the 1st Department of Obstetrics & Papageorgiou' Hospital (ESGO Certified Center for AOC), 2017 – 2019. Patients were triaged for PDS or IDS based on preoperative imaging and 'laparoscopic Fagotti's score'. Patient & tumor characteristics, treatment options and follow-up information were collected. Primary outcomes were ICU admittance, post-operative complications (Clavien – Dindo classification) and duration of hospitalization.

**Result(s)\*** 78 patients met the inclusion criteria: 40 underwent PDS and 38 IDS. The two groups had no significant difference in patients characteristics (age, Charlson comorbidity index (CCI)). Furthermore, concerning surgical outcomes PDS vs IDS group had higher surgical complexity score (SCS), blood loss and complete debulking rate, but with no statistical significance (5 vs. 4,  $p=0.1466/350$  vs. 300,  $p=0.1197/77.5\%$  vs. 68.4%,  $p=0.5958$  respectively). Only the duration of the surgery was statistically significant in the PDS group (300 vs. 195 min,  $p = 0.007$ ). The implementation of the ERAS protocol led to comparable results with no statistical significance for postoperative morbidity, between the two groups: The PDS group had higher ICU admittance (17.5% vs. 2.6%,  $p=0.9741$ ), lower overall complications (15 vs. 19,  $p=0.9741$ ) and the same hospitalization ( $8 \pm 3$  vs.  $8 \pm 2.8$  days,  $p=0.3805$ ).

**Conclusion\*** Careful preoperative selection of patients and the implementation of the ERAS program in the management of OC results in comparable postoperative morbidity between PDS and IDS, regardless of the higher SCS in the upfront surgery or the toxicity of the NACT. Further prospective studies are needed to validate these results.

484

#### SURGICAL MANAGEMENT OF PREMENOPAUSAL WOMEN WITH OVARIAN CANCER

C Martin-Gromaz, I Pelayo, V Corraliza-Galan\*, E Cabezas-Lopez, C Del Valle-Rubido, MJ Pablos-Antona, D Rubio-Marin, L Abarca-Martinez, E Moratalla-Bartolome, C Sanchez-Martinez, J Lazaro de la Fuente. Ramon y Cajal Hospital, Obstetrics and Gynecology, Madrid, Spain

10.1136/ijgc-2021-ESGO.412

**Introduction/Background\*** Ovarian cancer (OC) is the most lethal gynaecological malignancy worldwide. The standard management of ovarian cancer in premenopausal women is not clear, and much controversy remains as to whether within this group of patients some of them with advanced stages should have primary cytoreductive surgery followed by chemotherapy or neoadjuvant chemotherapy followed by interval cytoreductive surgery. There is increasing evidence that the patients gain the most benefit from surgery are those with no residual disease at the completion of surgery (R0 resection).

**Methodology** Retrospective analysis of women under 45 years old diagnosed of epithelial and non-epithelial ovarian cancer during the last 10 years.

**Result(s)\*** 25 women under 45 years with OC were reviewed. Mean age at diagnosis was 36.27 years (SD 5.77; min:21, max: 43). Most of the tumors (52% N:13) were epithelial serous OC (Clear cells: 20.0% N:5; Endometrioid: 12.0 N:3; Mucinous: 8.0% N:2; Endodermal sinus: 4.0% N:1; Granulosa cell: 4.0% N: 1). Most of the patients were diagnosed in advanced tumoral stages (III-IV: 68.0%, N:17). Only 7 patients received neoadjuvant chemotherapy (28%) previous to surgery. Surgical cytoreduction was made by laparotomy in most cases (84.0% N:21) preferred to laparoscopy (N:4, 16.0%). Complete surgical cytoreduction was achieved in 82.0% of cases (N:19). Surgical approach included: bilateral oophorectomy (96.0%, N:24), hysterectomy (82.0% N:19), omentectomy (96% N:24), appendectomy (60.0% N:15), peritoneal biopsy (92.0% N: 23), peritonectomy (60.0% N:15), liver resection (40.0% N:10), intestinal resection (32.0% N:8), splenectomy (N:4), colectomy (N:2). Pelvic and paraaortic lymphadenectomy was performed in 56.0% of